

# National Compensation Survey Technical Note

The National Compensation Survey (NCS) program provides information on the average hourly earnings for occupational groups and individual occupations for approximately 80 metropolitan areas and 70 nonmetropolitan counties. The survey covers establishments employing 50 workers or more in goods-producing industries (mining, construction and manufacturing); service-producing industries (transportation, communications, and public utilities; wholesale trade; retail trade; finance, insurance, and real estate; and services); and State and local governments. Agriculture, private households, and the Federal government are excluded from the survey.

## Survey design

For each survey area, the first stage of sample selection employs a technique that uses a probability proportional to employment size to select the sample of establishments to be studied. That is, larger establishments, in terms of employment size, will have a greater chance of selection than smaller establishments. Weights are then applied to each establishment so that the data collected can represent units of similar industry and employment size, which were not selected for collection. The second stage of sample selection is a probability sample of occupations within a sampled establishment. As with the selection of establishments, the selection of jobs within an establishment is also through sampling using probability proportional to size. Jobs are then classified into occupations based on their duties. A selected job may fall into any one of about 480 occupational classifications. In the last step, the work level of each selected occupation is determined using a “generic leveling” process. Using identical criteria, generic leveling ranks and compares all occupations based on duties and responsibilities.

## Presentation of data

The individual survey bulletins provide tabulations on the earnings of workers in a variety of occupational groups,

specific occupations, and a wide range of work levels. Also contained in the bulletins are information on the NCS program, a technical note describing survey procedures, and several appendixes with detailed information on occupational classifications and the generic leveling methodology. Earnings are defined as regular payments from the employer to the employee as compensation for straight-time hourly work, or for any salaried work performed. The following forms of payments are not considered part of straight-time earnings: shift differentials, premium pay for overtime, holidays, and weekends; bonuses not directly tied to production; uniform and tool allowances; free room and board; and payments, such as tips, made by third parties.

## Metropolitan areas

All agencies that collect and publish data for metropolitan areas use the most recent definitions of metropolitan areas established by the Office of Management and Budget. A Metropolitan Statistical Area (MSA) is defined in terms of entire counties, except in the six New England States where they are defined in terms of cities and towns. If an area has a population greater than one million and meets certain other requirements specified in the *Federal Register*, it is termed a Consolidated Metropolitan Statistical Area (CMSA).

## Additional information

For additional information regarding the NCS, please contact the Division of Compensation Data Analysis and Planning, 2 Massachusetts Ave. NE, Room 4175, Washington, DC 20212-0001.

Telephone: (202) 691-6199

Internet: <http://stats.bls.gov/comhome.htm>

TABLE C-1. Mean hourly earnings<sup>1</sup> for selected occupations, all workers, all industries, selected areas,<sup>2</sup> 1998

Occupation <sup>3</sup>	Boston- Worcester- Lawrence, MA-NH-ME-CT	Chicago- Gary- Kenosha, IL-IN-WI	Dallas- Fort Worth, TX	St. Louis, MO-IL	Washington- Baltimore, DC-MD-VA-WV
<b>ALL WORKERS</b> .....	\$18.20	\$17.47	\$16.34	\$16.37	\$17.48
All workers excluding sales .....	18.40	17.19	16.55	16.61	17.59
<b>WHITE COLLAR</b> .....	21.60	21.74	20.45	18.82	20.75
White collar excluding sales .....	22.32	21.64	21.42	19.60	21.39
Professional specialty and technical .....	26.24	25.16	24.81	22.92	25.51
Professional specialty .....	28.52	26.05	25.53	24.22	26.71
Engineers, architects, and surveyors .....	31.22	30.98	28.75	29.71	28.56
Civil engineers .....	28.34	—	—	27.37	24.66
Electrical and electronic engineers .....	—	32.26	28.76	—	30.11
Industrial engineers .....	26.99	26.92	22.95	21.77	—
Mechanical engineers .....	28.62	26.70	26.56	—	—
Engineers, n.e.c. ....	30.95	31.63	31.32	27.64	31.96
Mathematical and computer scientists .....	30.48	27.26	28.23	24.31	26.76
Computer systems analysts and scientists .....	31.26	27.65	28.29	24.71	27.29
Operations and systems researchers and analysts .....	23.20	23.65	—	22.39	21.61
Natural scientists .....	32.38	—	44.02	28.60	21.17
Chemists, except biochemists .....	28.81	—	—	—	—
Geologists and geodesists .....	—	—	45.84	—	—
Medical scientists .....	29.68	—	—	—	—
Health related .....	24.66	22.51	20.65	20.65	25.13
Physicians .....	48.53	40.28	—	44.77	38.83
Registered nurses .....	22.71	21.12	20.08	18.21	23.22
Pharmacists .....	24.56	27.42	23.88	—	27.32
Respiratory therapists .....	19.10	17.58	—	—	20.94
Occupational therapists .....	—	25.92	—	—	—
Physical therapists .....	26.32	25.24	—	21.79	33.38
Speech therapists .....	—	29.71	—	—	28.97
Therapists, n.e.c. ....	—	—	—	—	18.85
Teachers, college and university .....	42.93	35.01	30.55	25.43	31.69
Medical science teachers .....	37.18	—	45.47	—	—
Business, commerce and marketing teachers .....	69.78	—	—	—	28.85
Art, drama and music teachers .....	30.08	—	—	22.46	—
English teachers .....	35.89	—	—	—	21.36
Foreign language teachers .....	36.34	—	—	—	—
Teachers, post secondary, subject not specified ..	35.42	—	—	26.67	—
Teachers, post secondary, n.e.c. ....	50.42	38.80	27.89	22.56	30.65
Teachers, except college and university .....	30.32	30.24	22.53	25.52	26.63
Prekindergarten and kindergarten .....	25.58	—	17.54	16.70	25.08
Elementary school teachers .....	31.06	32.05	22.53	28.00	28.04
Secondary school teachers .....	31.75	38.48	23.60	27.89	29.57
Teachers, special education .....	28.17	27.62	22.06	22.11	26.97
Teachers, n.e.c. ....	33.73	21.55	21.30	15.11	28.16
Substitute teachers .....	—	—	—	—	8.34
Vocational and educational counselors .....	24.29	19.13	25.08	—	24.87
Librarians, archivists, and curators .....	25.01	18.66	18.01	—	21.36
Librarians .....	25.09	18.98	18.01	—	21.24
Social scientists and urban planners .....	—	25.18	24.19	22.58	26.18
Economists .....	—	—	—	20.58	—
Psychologists .....	—	25.08	26.09	—	22.07
Social, recreation, and religious workers .....	16.81	15.27	13.33	15.33	14.14
Social workers .....	16.94	15.25	14.16	15.25	14.09
Recreation workers .....	—	—	—	—	14.73
Lawyers and judges .....	35.54	35.78	38.03	32.34	42.91
Lawyers .....	—	35.73	37.36	32.34	42.91
Writers, authors, entertainers, athletes, and professionals, n.e.c. ....	22.68	20.23	27.29	19.30	26.54

See footnotes at end of table.

TABLE C-1. Mean hourly earnings<sup>1</sup> for selected occupations, all workers, all industries, selected areas,<sup>2</sup> 1998—Continued

Occupation <sup>3</sup>	Boston- Worcester- Lawrence, MA-NH-ME-CT	Chicago- Gary- Kenosha, IL-IN-WI	Dallas- Fort Worth, TX	St. Louis, MO-IL	Washington- Baltimore, DC-MD-VA-WV
<b>WHITE COLLAR—Continued</b>					
Professional specialty and technical—Continued					
Professional specialty—Continued					
Writers, authors, entertainers, athletes, and professionals, n.e.c.—Continued					
Designers .....	\$24.29	\$17.39	\$20.49	\$17.00	\$17.14
Editors and reporters .....	24.15	19.40	21.13	—	30.20
Public relations specialists .....	20.41	23.21	—	17.76	30.01
Professionals, n.e.c. ....	23.49	22.67	—	28.44	28.73
Technical .....	18.24	22.19	22.09	17.45	19.36
Clinical laboratory technologists and technicians .....					
Radiological technicians .....	15.23	17.69	14.61	15.91	16.32
Licensed practical nurses .....	22.82	18.31	16.09	16.71	18.18
Health technologists and technicians, n.e.c. ....	16.59	13.35	13.95	10.75	15.22
Electrical and electronic technicians .....	14.07	13.24	12.59	11.38	15.12
Engineering technicians, n.e.c. ....	19.07	18.42	16.87	18.38	17.87
Drafters .....	22.57	22.73	16.16	—	—
Airplane pilots and navigators .....	21.31	18.60	16.64	17.49	—
Broadcast equipment operators .....	—	92.64	95.50	—	70.90
Computer programmers .....	—	—	—	—	17.15
Legal assistants .....	22.84	22.05	21.51	20.60	20.65
Technical and related, n.e.c. ....	—	19.06	—	—	—
Technical and related, n.e.c. ....	19.74	19.95	15.21	16.07	15.50
Executive, administrative, and managerial .....	28.89	28.97	28.73	26.10	27.11
Executives, administrators, and managers .....	34.57	34.85	33.41	31.14	31.73
Administrators and officials, public administration .....					
Financial managers .....	24.05	30.73	25.94	23.97	24.68
Personnel and labor relations managers .....	34.57	29.58	36.14	32.30	46.09
Managers, marketing, advertising and public relations .....	38.77	33.97	35.49	41.06	30.39
Administrators, education and related fields .....	41.59	38.69	38.50	32.38	35.02
Managers, medicine and health .....	33.43	32.73	27.89	28.39	30.40
Managers, service organizations, n.e.c. ....	27.64	28.66	36.18	24.83	29.57
Managers and administrators, n.e.c. ....	—	24.81	24.34	18.19	29.46
Management related .....	38.17	39.55	35.35	33.37	32.01
Accountants and auditors .....	21.35	21.98	21.20	19.86	20.63
Other financial officers .....	20.03	20.42	20.00	18.10	18.77
Management analysts .....	22.52	27.96	23.21	20.93	21.64
Personnel, training, and labor relations specialists .....	24.54	27.04	25.25	—	29.66
Buyers, wholesale and retail trade, except farm products .....	20.59	22.48	20.25	17.82	20.33
Purchasing agents and buyers, n.e.c. ....	23.37	—	—	—	—
Construction inspectors .....	19.90	23.16	22.74	20.75	24.88
Inspectors and compliance officers, except construction .....	—	—	—	18.31	—
Management related, n.e.c. ....	—	—	18.00	—	17.30
Management related, n.e.c. ....	22.23	19.82	21.75	21.66	21.43
Sales .....	15.31	22.57	13.59	13.17	15.96
Supervisors, sales .....	17.85	38.60	17.00	19.17	26.45
Securities and financial services sales .....	—	61.48	16.16	—	—
Advertising and related sales .....	—	18.35	28.01	—	—
Sales, other business services .....	28.07	30.50	15.18	23.45	23.69
Sales representatives, mining, manufacturing, and wholesale .....	35.73	32.91	22.06	23.38	19.26

See footnotes at end of table.

TABLE C-1. Mean hourly earnings<sup>1</sup> for selected occupations, all workers, all industries, selected areas,<sup>2</sup> 1998—Continued

Occupation <sup>3</sup>	Boston- Worcester- Lawrence, MA-NH-ME-CT	Chicago- Gary- Kenosha, IL-IN-WI	Dallas- Fort Worth, TX	St. Louis, MO-IL	Washington- Baltimore, DC-MD-VA-WV
<b>WHITE COLLAR—Continued</b>					
Sales—Continued					
Sales workers, motor vehicles and boats .....	—	\$21.10	\$16.23	\$27.05	—
Sales workers, apparel .....	\$7.19	—	—	—	\$15.98
Sales workers, hardware and building supplies ...	—	—	—	—	10.58
Sales workers, other commodities .....	9.95	9.08	10.72	—	10.00
Sales counter clerks .....	—	—	—	8.23	10.44
Cashiers .....	8.47	7.80	6.93	7.97	9.27
Sales support, n.e.c. ....	14.15	—	11.03	—	—
Administrative support, including clerical .....	12.91	13.23	12.27	11.92	12.91
Supervisors, general office .....	17.78	18.20	17.50	17.02	18.50
Supervisors, financial records processing .....	18.68	16.62	18.46	15.09	—
Supervisors, distribution, scheduling, and adjusting clerks .....	—	19.28	—	—	—
Computer operators .....	16.50	16.30	13.53	12.96	14.54
Secretaries .....	15.18	14.34	14.03	13.10	14.90
Typists .....	13.15	13.37	—	11.37	13.69
Interviewers .....	11.40	—	10.14	—	—
Hotel clerks .....	9.54	—	—	—	7.87
Transportation ticket and reservation agents .....	13.54	11.08	12.34	—	14.04
Receptionists .....	10.00	10.76	10.00	8.59	9.52
Information clerks, n.e.c. ....	14.11	12.33	10.92	10.02	12.71
Order clerks .....	11.99	12.79	12.63	10.04	12.72
Personnel clerks, except payroll & timekeeping ...	—	14.12	12.82	—	14.07
Library clerks .....	13.25	10.80	9.26	9.04	9.48
File clerks .....	—	—	11.33	—	—
Records clerks, n.e.c. ....	11.41	13.05	10.71	10.85	11.57
Bookkeepers, accounting and auditing clerks .....	12.69	12.00	12.14	10.70	11.63
Payroll and timekeeping clerks .....	12.50	15.15	—	14.62	—
Billing clerks .....	10.59	12.65	11.56	12.09	12.54
Telephone operators .....	11.42	8.92	9.90	13.17	11.60
Mail clerks, except postal service .....	8.75	10.82	9.10	—	8.03
Dispatchers .....	—	13.88	13.48	11.27	12.74
Production coordinators .....	—	—	—	15.44	—
Traffic, shipping and receiving clerks .....	12.63	15.01	11.14	11.89	—
Stock and inventory clerks .....	15.92	12.31	10.39	11.80	12.29
Material recording, scheduling, and distribution clerks, n.e.c. ....	—	—	12.57	10.20	12.72
Insurance adjusters, examiners, and investigators .....	16.04	22.74	15.32	15.41	14.92
Investigators and adjusters, except insurance .....	13.02	17.58	12.14	12.01	12.46
Eligibility clerks, social welfare .....	—	—	—	—	12.98
Bill and account collectors .....	12.35	12.09	11.49	13.98	—
General office clerks .....	12.91	12.30	10.76	10.34	12.05
Bank tellers .....	—	8.78	10.65	9.06	—
Data entry keyers .....	11.48	10.02	9.26	8.11	8.81
Statistical clerks .....	—	—	—	—	13.51
Teachers' aides .....	11.03	11.03	9.13	9.27	11.30
Administrative support, n.e.c. ....	13.46	14.67	11.59	11.12	11.96
<b>BLUE COLLAR</b> .....	14.38	14.29	12.23	14.82	14.58
Precision production, craft, and repair .....	18.37	20.13	15.46	18.08	17.79
Supervisors, mechanics and repairers .....	—	24.54	23.95	21.37	—
Automobile mechanics .....	18.13	21.11	16.33	—	16.64
Bus, truck, and stationary engine mechanics .....	20.36	17.90	14.33	—	19.47

See footnotes at end of table.

TABLE C-1. Mean hourly earnings<sup>1</sup> for selected occupations, all workers, all industries, selected areas,<sup>2</sup> 1998—Continued

Occupation <sup>3</sup>	Boston- Worcester- Lawrence, MA-NH-ME-CT	Chicago- Gary- Kenosha, IL-IN-WI	Dallas- Fort Worth, TX	St. Louis, MO-IL	Washington- Baltimore, DC-MD-VA-WV
<b>BLUE COLLAR—Continued</b>					
Precision production, craft, and repair—Continued					
Aircraft engine mechanics .....	—	—	\$19.85	—	—
Heavy equipment mechanics .....	—	\$19.63	—	—	—
Industrial machinery repairers .....	\$15.37	17.42	14.76	\$15.25	\$15.70
Electronic repairers, communications and industrial equipment .....	—	16.97	21.01	16.09	—
Heating, air conditioning, and refrigeration mechanics .....	—	16.32	16.21	—	—
Millwrights .....	—	17.76	—	—	—
Mechanics and repairers, n.e.c. ....	19.04	15.79	15.65	15.94	19.03
Supervisors, electricians and power transmission installers .....	—	—	—	—	25.23
Supervisors, construction trades, n.e.c. ....	—	27.40	18.80	—	—
Carpenters .....	21.69	24.82	11.90	23.35	14.85
Electricians .....	22.44	25.56	19.27	20.98	19.84
Electrician apprentices .....	—	—	—	—	10.94
Electrical power installers and repairers .....	24.45	—	—	—	—
Plumbers, pipefitters and steamfitters .....	19.76	24.19	16.76	21.60	—
Construction trades, n.e.c. ....	17.39	—	13.22	—	14.00
Supervisors, production .....	19.03	21.29	18.52	19.51	19.80
Tool and die makers .....	—	23.00	—	—	—
Precision assemblers, metal .....	—	—	16.77	—	—
Machinists .....	18.96	20.13	—	20.31	—
Sheet metal workers .....	—	—	14.78	—	—
Electrical and electronic equipment assemblers ..	11.98	14.18	9.98	—	14.01
Butchers and meat cutters .....	14.20	—	13.81	—	—
Inspectors, testers, and graders .....	—	17.16	13.59	—	—
Stationary engineers .....	—	25.63	13.64	—	17.64
Machine operators, assemblers, and inspectors .....	11.95	11.93	11.17	13.59	12.67
Punching and stamping press operators .....	—	13.73	—	11.84	—
Grinding, abrading, buffing, and polishing machine operators .....	—	12.51	—	13.57	—
Numerical control machine operators .....	—	—	17.05	—	—
Fabricating machine operators, n.e.c. ....	—	13.85	11.54	12.34	—
Molding and casting machine operators .....	9.99	10.40	—	—	—
Printing press operators .....	14.15	—	14.67	15.70	16.20
Textile sewing machine operators .....	9.83	—	6.57	—	—
Laundering and dry cleaning machine operators .....	7.84	—	—	—	8.45
Packaging and filling machine operators .....	—	12.61	10.82	—	—
Extruding and forming machine operators .....	—	—	10.46	—	—
Mixing and blending machine operators .....	—	16.52	—	—	—
Painting and paint spraying machine operators ...	—	—	—	13.80	—
Slicing and cutting machine operators .....	—	14.00	10.67	—	—
Miscellaneous machine operators, n.e.c. ....	12.15	12.73	10.82	12.79	11.57
Welders and cutters .....	15.39	17.07	12.36	12.27	—
Assemblers .....	9.17	8.62	11.65	14.93	12.99
Miscellaneous hand working, n.e.c. ....	—	—	9.11	—	—
Production inspectors, checkers and examiners ..	11.04	11.89	11.42	12.78	9.07
Production testers .....	11.09	—	11.68	—	—
Transportation and material moving .....	15.64	15.00	13.43	14.91	14.32
Truck drivers .....	15.31	17.39	13.98	15.29	13.51
Driver-sales workers .....	—	—	—	—	11.55
Bus drivers .....	15.06	13.33	11.18	11.94	14.20

See footnotes at end of table.

TABLE C-1. Mean hourly earnings<sup>1</sup> for selected occupations, all workers, all industries, selected areas,<sup>2</sup> 1998—Continued

Occupation <sup>3</sup>	Boston- Worcester- Lawrence, MA-NH-ME-CT	Chicago- Gary- Kenosha, IL-IN-WI	Dallas- Fort Worth, TX	St. Louis, MO-IL	Washington- Baltimore, DC-MD-VA-WV
<b>BLUE COLLAR—Continued</b>					
Transportation and material moving—Continued					
Motor transportation, n.e.c. ....	—	—	—	\$5.94	—
Supervisors, material moving equipment .....	—	\$14.59	—	—	\$21.35
Operating engineers .....	—	22.93	—	—	—
Crane and tower operators .....	—	14.20	—	—	—
Excavating and loading machine operators .....	\$24.03	—	—	—	—
Industrial truck and tractor equipment operators ..	11.62	12.12	\$10.85	13.65	14.15
Miscellaneous material moving equipment operators, n.e.c. ....	—	13.42	16.83	—	—
Handlers, equipment cleaners, helpers, and laborers .....					
Groundskeepers and gardeners, except farm .....	11.41	10.97	9.28	11.73	11.13
Supervisors, handlers, equipment cleaners, and laborers, n.e.c. ....	12.44	10.46	8.15	12.61	9.73
Helpers, construction trades .....	—	17.54	—	14.10	—
Construction laborers .....	—	—	—	—	10.44
Production helpers .....	19.51	17.77	7.20	17.61	12.42
Stock handlers and baggers .....	—	7.70	8.42	10.79	—
Machine feeders and offbearers .....	8.79	9.21	8.33	8.44	10.48
Freight, stock, and material handlers, n.e.c. ....	11.18	12.60	—	—	—
Vehicle washers and equipment cleaners .....	10.76	14.61	11.22	14.96	12.61
Hand packers and packagers .....	—	8.98	9.79	—	10.09
Laborers, except construction, n.e.c. ....	8.95	9.02	9.99	9.67	11.10
	11.45	10.47	9.27	11.39	9.88
<b>SERVICE</b> .....	11.00	10.75	8.85	9.26	10.13
Protective service .....					
Supervisors, firefighters and fire prevention .....	14.80	17.26	12.38	14.86	16.03
Supervisors, police and detectives .....	23.42	—	18.61	—	—
Supervisors, guards .....	26.69	—	23.74	21.57	—
Supervisors, guards .....	—	9.06	17.64	—	21.43
Firefighting .....	17.42	20.43	14.49	—	16.71
Police and detectives, public service .....	18.83	23.09	19.42	16.30	18.71
Sheriffs, bailiffs, and other law enforcement officers .....	—	—	14.48	—	16.25
Correctional institution officers .....	—	—	11.18	—	15.19
Guards and police, except public service .....	8.94	9.05	7.92	11.71	8.59
Protective service, n.e.c. ....	8.23	11.49	—	—	16.91
Food service .....					
Supervisors, food preparation and service .....	7.54	7.49	6.79	7.06	7.41
Bartenders .....	14.53	11.75	11.09	12.03	13.99
Waiters and waitresses .....	6.62	8.98	—	—	7.34
Cooks .....	3.55	4.75	3.94	3.39	4.08
Food counter, fountain, and related .....	10.37	9.37	7.88	9.10	8.87
Kitchen workers, food preparation .....	7.31	5.93	5.72	5.97	6.71
Waiters'/waitresses' assistants .....	8.28	7.55	7.62	7.34	8.86
Food preparation, n.e.c. ....	5.22	4.46	7.64	4.98	6.69
Health service .....	7.46	7.54	6.13	6.50	7.32
Health aides, except nursing .....	10.44	9.28	7.86	8.25	9.30
Nursing aides, orderlies and attendants .....	10.35	10.15	8.45	9.00	10.37
Cleaning and building service .....	10.41	8.95	7.64	8.03	8.98
Supervisors, cleaning and building service workers .....	10.81	9.79	7.04	8.26	9.02
Maids and housemen .....	16.12	11.54	13.95	—	12.35
Janitors and cleaners .....	8.51	7.80	5.96	6.71	8.75
	10.80	9.94	6.75	8.28	8.79

See footnotes at end of table.

TABLE C-1. Mean hourly earnings<sup>1</sup> for selected occupations, all workers, all industries, selected areas,<sup>2</sup> 1998—Continued

Occupation <sup>3</sup>	Boston- Worcester- Lawrence, MA-NH-ME-CT	Chicago- Gary- Kenosha, IL-IN-WI	Dallas- Fort Worth, TX	St. Louis, MO-IL	Washington- Baltimore, DC-MD-VA-WV
<b>SERVICE—Continued</b>					
Personal service .....	\$11.22	\$10.60	\$13.25	\$10.10	\$9.90
Attendants, amusement and recreation facilities ..	—	6.67	—	—	6.40
Public transportation attendants .....	—	—	—	—	19.78
Baggage porters and bellhops .....	—	—	—	—	5.49
Welfare service aides .....	10.11	7.46	—	—	—
Early childhood teachers' assistants .....	—	7.40	8.32	7.68	12.42
Child care workers, n.e.c. ....	8.59	10.10	—	7.53	8.26
Service, n.e.c. ....	10.19	8.86	7.38	8.50	8.59

<sup>1</sup> Earnings are the straight-time hourly wages or salaries paid to employees. They include incentive pay, cost-of-living adjustments, hazard pay, deferred income payments, and deadhead pay. Excluded are shift differentials, premium pay for overtime, vacations, and holidays, non-production bonuses, uniform and tool allowances, room and board, third party payments, on-call pay, and tips. The mean is computed by totaling the pay of all workers weighted by hours and dividing by the number of workers.

<sup>2</sup> The average payroll month for Boston-Worcester-Lawrence, MA-NH-ME-CT was October 1998; Chicago-Gary-Kenosha, IL-IN-WI was October 1998; Dallas-

Fort Worth, TX was July 1998; St. Louis, MO-IL was June 1998; and Washington-Baltimore, DC-MD-VA-WV was August 1998.

<sup>3</sup> A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. Individual occupations are classified into one of nine major occupational groups.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups may include data for categories not shown separately. n.e.c. means "not elsewhere classified."

TABLE C-2. Mean hourly earnings<sup>1</sup> by occupational group and level,<sup>2</sup> all workers, selected areas,<sup>3</sup> 1998

Occupational group <sup>4</sup> and level	Boston- Worcester- Lawrence, MA-NH-ME-CT	Chicago- Gary- Kenosha, IL-IN-WI	Dallas- Fort Worth, TX	St. Louis, MO-IL	Washington- Baltimore, DC-MD-VA-WV
<b>ALL</b> .....	\$18.20	\$17.47	\$16.34	\$16.37	\$17.48
All excluding sales .....	18.40	17.19	16.55	16.61	17.59
<b>WHITE COLLAR</b> .....	21.60	21.74	20.45	18.82	20.75
Level 1 .....	6.89	7.66	6.19	7.39	7.05
Level 2 .....	8.41	9.02	8.24	8.21	9.73
Level 3 .....	10.73	10.52	9.19	9.36	9.80
Level 4 .....	12.14	12.88	11.05	10.21	12.44
Level 5 .....	13.98	16.51	13.72	13.32	14.91
Level 6 .....	15.58	16.63	15.86	14.19	16.44
Level 7 .....	19.93	19.38	17.98	16.62	19.27
Level 8 .....	19.54	21.22	20.62	21.89	20.52
Level 9 .....	25.86	26.42	23.75	22.41	25.33
Level 10 .....	25.83	27.92	26.74	27.12	25.56
Level 11 .....	30.70	34.36	34.46	28.08	30.41
Level 12 .....	39.36	37.85	37.27	35.87	37.54
Level 13 .....	49.81	76.86	42.77	45.12	40.99
Level 14 .....	55.99	59.46	53.61	49.18	55.08
Level 15 .....	-	88.50	-	-	-
Not able to be leveled .....	27.16	24.78	33.03	20.14	23.78
White-collar excluding sales .....	22.32	21.64	21.42	19.60	21.39
Level 1 .....	7.68	8.65	6.42	8.13	7.66
Level 2 .....	8.97	9.50	8.52	8.57	10.42
Level 3 .....	10.77	10.81	9.74	9.63	10.18
Level 4 .....	12.32	12.77	11.50	10.52	12.40
Level 5 .....	14.09	15.26	13.81	13.21	14.80
Level 6 .....	15.89	16.79	16.00	14.10	15.63
Level 7 .....	19.98	18.82	17.80	16.54	19.15
Level 8 .....	19.90	21.27	20.66	21.57	20.62
Level 9 .....	25.61	25.55	23.85	22.40	25.26
Level 10 .....	25.65	28.00	26.94	24.85	25.13
Level 11 .....	30.02	33.56	34.63	28.26	29.55
Level 12 .....	38.52	36.95	37.28	35.86	37.60
Level 13 .....	49.66	61.32	42.48	45.12	40.99
Level 14 .....	55.99	59.63	53.61	49.18	55.08
Level 15 .....	-	88.50	-	-	-
Not able to be leveled .....	27.03	25.08	32.81	20.49	23.79
<b>Professional specialty and technical</b> .....	26.24	25.16	24.81	22.92	25.51
Professional specialty .....	28.52	26.05	25.53	24.22	26.71
Level 5 .....	12.38	13.93	15.23	12.72	16.49
Level 6 .....	16.56	16.94	17.24	11.75	16.62
Level 7 .....	21.93	21.03	19.37	18.22	21.33
Level 8 .....	21.84	22.64	21.21	23.46	21.81
Level 9 .....	27.06	27.31	24.36	22.76	26.71
Level 10 .....	24.84	25.09	27.99	24.05	25.33
Level 11 .....	30.29	29.54	31.02	28.25	28.71
Level 12 .....	38.32	35.48	34.89	33.70	35.63
Level 13 .....	49.78	54.53	40.79	43.56	39.67
Level 14 .....	54.69	-	43.45	-	49.07
Not able to be leveled .....	27.28	27.73	32.79	20.96	24.09
Engineers, architects, and surveyors .....	31.22	30.98	28.75	29.71	28.56
Level 5 .....	-	-	19.06	-	18.56
Level 7 .....	21.13	-	22.84	-	22.55
Level 8 .....	-	-	22.88	-	23.72
Level 9 .....	24.71	26.85	26.76	23.04	25.29
Level 10 .....	-	29.67	28.55	-	30.94
Level 11 .....	31.02	32.12	30.75	-	30.71

See footnotes at end of table.

TABLE C-2. Mean hourly earnings<sup>1</sup> by occupational group and level,<sup>2</sup> all workers, selected areas,<sup>3</sup> 1998—Continued

Occupational group <sup>4</sup> and level	Boston- Worcester- Lawrence, MA-NH-ME-CT	Chicago- Gary- Kenosha, IL-IN-WI	Dallas- Fort Worth, TX	St. Louis, MO-IL	Washington- Baltimore, DC-MD-VA-WV
<b>WHITE COLLAR—Continued</b>					
<b>Professional specialty and technical—Continued</b>					
Professional specialty—Continued					
Engineers, architects, and surveyors—Continued					
Level 12 .....	\$38.19	—	\$36.40	\$33.15	\$34.54
Level 13 .....	45.40	—	—	—	—
Mathematical and computer scientists .....	30.48	\$27.26	28.23	24.31	26.76
Level 6 .....	—	—	—	—	17.67
Level 7 .....	20.58	—	—	—	20.90
Level 8 .....	—	—	19.80	—	25.31
Level 9 .....	24.12	23.57	25.88	23.82	25.00
Level 10 .....	—	28.89	30.37	—	26.11
Level 11 .....	30.23	30.08	31.74	27.10	28.80
Level 12 .....	34.09	37.14	33.28	29.52	34.22
Level 13 .....	44.73	—	41.01	—	—
Natural scientists .....	32.38	—	44.02	28.60	21.17
Level 9 .....	—	—	—	—	16.68
Level 13 .....	46.30	—	—	—	—
Health related .....	24.66	22.51	20.65	20.65	25.13
Level 5 .....	—	—	—	—	17.71
Level 6 .....	—	18.87	18.17	—	16.60
Level 7 .....	20.33	20.14	17.26	16.65	19.19
Level 8 .....	23.17	21.40	19.07	18.61	21.97
Level 9 .....	22.67	22.80	20.66	19.82	26.15
Level 10 .....	22.13	—	—	—	25.01
Level 11 .....	27.00	23.84	31.19	34.46	27.78
Level 12 .....	—	—	—	—	53.01
Level 13 .....	—	—	—	—	49.92
Not able to be leveled .....	—	—	—	—	25.93
Teachers, college and university .....	42.93	35.01	30.55	25.43	31.69
Level 7 .....	—	—	—	19.48	—
Level 8 .....	—	—	—	21.96	29.04
Level 9 .....	25.91	—	20.86	29.79	26.96
Level 10 .....	30.41	—	27.96	27.42	26.01
Level 11 .....	33.15	35.92	27.48	29.42	30.52
Level 12 .....	44.48	33.66	—	—	23.80
Level 13 .....	64.07	40.66	43.99	—	35.00
Teachers, except college and university .....	30.32	30.24	22.53	25.52	26.63
Level 5 .....	11.54	12.38	—	—	9.82
Level 6 .....	—	18.81	—	10.19	12.50
Level 7 .....	26.74	26.34	21.50	21.77	28.94
Level 8 .....	21.25	35.10	22.46	27.47	27.65
Level 9 .....	34.40	32.34	23.16	28.85	28.82
Level 10 .....	—	—	—	—	22.07
Level 11 .....	31.21	—	29.35	—	27.91
Librarians, archivists, and curators .....	25.01	18.66	18.01	—	21.36
Level 6 .....	—	—	—	—	13.67
Level 8 .....	—	17.81	—	—	—
Level 9 .....	24.93	20.37	—	—	20.00
Level 11 .....	—	—	—	—	27.33
Social scientists and urban planners .....	—	25.18	24.19	22.58	26.18
Level 9 .....	—	26.35	—	—	—
Level 10 .....	—	—	26.52	—	—
Social, religious, and recreation workers .....	16.81	15.27	13.33	15.33	14.14
Level 6 .....	—	15.37	—	—	—
Level 7 .....	16.06	14.80	14.32	—	11.97
Level 8 .....	16.25	14.87	—	14.38	—

See footnotes at end of table.

TABLE C-2. Mean hourly earnings<sup>1</sup> by occupational group and level,<sup>2</sup> all workers, selected areas,<sup>3</sup> 1998—Continued

Occupational group <sup>4</sup> and level	Boston- Worcester- Lawrence, MA-NH-ME-CT	Chicago- Gary- Kenosha, IL-IN-WI	Dallas- Fort Worth, TX	St. Louis, MO-IL	Washington- Baltimore, DC-MD-VA-WV
<b>WHITE COLLAR—Continued</b>					
<b>Professional specialty and technical—Continued</b>					
Professional specialty—Continued					
Social, religious, and recreation workers—Continued					
Level 9 .....	\$16.99	\$15.35	—	—	—
Level 11 .....	—	19.41	—	—	—
Lawyers and judges .....	35.54	35.78	\$38.03	\$32.34	\$42.91
Level 13 .....	—	—	—	—	46.41
Writers, authors, entertainers, athletes, and professionals, n.e.c. ....					
Level 7 .....	22.68	20.23	27.29	19.30	26.54
Level 8 .....	18.12	—	—	—	18.82
Level 9 .....	—	—	19.73	—	—
Level 11 .....	20.88	21.06	24.97	21.18	26.56
Level 12 .....	31.30	—	—	—	—
Level 12 .....	36.94	—	—	—	42.54
Not able to be leveled .....	17.80	18.85	33.12	19.04	25.01
Technical .....	18.24	22.19	22.09	17.45	19.36
Level 3 .....	11.01	—	8.47	—	—
Level 4 .....	11.93	13.29	11.42	9.11	12.31
Level 5 .....	15.43	14.88	14.93	13.71	14.58
Level 6 .....	16.51	17.80	14.98	16.66	15.34
Level 7 .....	20.18	18.23	17.64	15.68	18.03
Level 8 .....	18.06	20.71	17.88	17.77	18.18
Level 9 .....	23.21	22.57	25.36	22.81	22.32
Level 11 .....	37.20	93.89	102.90	—	89.42
Not able to be leveled .....	21.04	19.16	—	—	—
<b>Executive, administrative, and managerial</b> .....					
Level 5 .....	28.89	28.97	28.73	26.10	27.11
Level 6 .....	15.43	14.48	13.88	14.03	17.27
Level 7 .....	16.11	16.59	16.53	15.40	15.28
Level 8 .....	17.35	18.06	16.86	16.50	18.59
Level 9 .....	18.08	19.57	19.33	17.76	19.62
Level 9 .....	23.38	23.19	22.95	21.87	23.00
Level 10 .....	26.21	30.44	24.30	27.26	24.14
Level 11 .....	28.98	31.04	29.90	28.53	28.65
Level 12 .....	38.83	37.99	39.82	34.48	39.46
Level 13 .....	49.55	57.13	44.20	46.91	41.76
Level 14 .....	56.85	58.12	56.49	48.66	57.65
Level 15 .....	—	91.51	—	—	—
Not able to be leveled .....	30.16	31.67	38.60	28.06	28.20
Executives, administrators, and managers .....	34.57	34.85	33.41	31.14	31.73
Level 5 .....	—	—	—	—	17.81
Level 6 .....	15.88	—	—	—	17.05
Level 7 .....	17.32	17.74	17.82	16.17	18.37
Level 8 .....	19.18	21.01	21.23	17.20	21.24
Level 9 .....	24.07	22.89	23.08	22.78	23.38
Level 10 .....	26.75	29.82	24.20	27.06	30.72
Level 11 .....	30.41	31.30	31.22	29.07	29.56
Level 12 .....	41.61	38.59	39.94	36.62	40.40
Level 13 .....	49.30	58.22	44.30	46.99	40.84
Level 14 .....	56.91	58.07	56.70	49.88	57.65
Level 15 .....	—	91.51	—	—	—
Not able to be leveled .....	36.52	40.86	41.97	28.20	27.20
Management related .....	21.35	21.98	21.20	19.86	20.63
Level 5 .....	15.48	14.48	14.36	13.13	16.79
Level 6 .....	16.31	16.88	16.46	15.81	14.84
Level 7 .....	17.35	18.17	16.48	16.60	18.70

See footnotes at end of table.

TABLE C-2. Mean hourly earnings<sup>1</sup> by occupational group and level,<sup>2</sup> all workers, selected areas,<sup>3</sup> 1998—Continued

Occupational group <sup>4</sup> and level	Boston- Worcester- Lawrence, MA-NH-ME-CT	Chicago- Gary- Kenosha, IL-IN-WI	Dallas- Fort Worth, TX	St. Louis, MO-IL	Washington- Baltimore, DC-MD-VA-WV
<b>WHITE COLLAR—Continued</b>					
<b>Executive, administrative, and managerial—Continued</b>					
Management related—Continued					
Level 8 .....	\$17.85	\$18.97	\$18.48	\$18.00	\$18.78
Level 9 .....	22.65	23.50	22.74	20.68	22.56
Level 10 .....	—	31.62	24.46	—	20.21
Level 11 .....	25.15	30.13	26.25	—	25.66
Level 12 .....	29.62	—	39.08	28.99	31.24
Not able to be leveled .....	22.35	21.25	23.14	—	—
<b>Sales .....</b>					
Level 1 .....	15.31	22.57	13.59	13.17	15.96
Level 2 .....	6.69	6.28	6.13	7.12	6.33
Level 3 .....	7.31	7.54	7.31	6.64	8.36
Level 4 .....	10.53	9.03	7.65	8.78	8.23
Level 5 .....	11.09	13.71	8.77	8.63	12.56
Level 6 .....	13.02	24.93	12.92	14.07	16.02
Level 7 .....	12.12	14.55	15.35	—	23.29
Level 8 .....	—	24.63	19.45	—	21.49
Level 9 .....	15.62	20.37	20.17	25.52	19.59
Level 10 .....	29.76	43.50	21.89	—	27.80
Level 11 .....	27.67	27.49	24.34	36.24	—
Level 12 .....	39.81	42.77	30.64	—	38.10
<b>Administrative support, including clerical .....</b>					
Level 1 .....	12.91	13.23	12.27	11.92	12.91
Level 2 .....	7.68	8.65	6.42	8.13	7.66
Level 3 .....	8.96	9.52	8.52	8.70	10.42
Level 4 .....	10.76	10.84	9.78	9.64	10.21
Level 5 .....	12.41	12.72	11.54	10.69	12.44
Level 6 .....	13.71	15.63	13.47	13.01	13.53
Level 7 .....	15.55	16.34	15.90	13.27	15.60
Level 8 .....	18.33	17.12	16.79	15.09	16.81
Level 9 .....	18.40	19.97	18.98	16.66	20.79
Level 10 .....	21.43	21.68	20.46	22.39	23.14
Not able to be leveled .....	18.97	12.89	11.05	—	—
<b>BLUE COLLAR .....</b>					
Level 1 .....	14.38	14.29	12.23	14.82	14.58
Level 2 .....	9.64	7.88	7.63	7.53	9.21
Level 3 .....	10.56	10.83	8.64	9.36	10.42
Level 4 .....	11.60	13.91	11.47	14.67	11.48
Level 5 .....	12.40	15.31	12.64	12.60	14.27
Level 6 .....	15.72	16.28	13.11	13.11	14.14
Level 7 .....	16.73	18.95	14.79	17.83	16.22
Level 8 .....	19.41	21.92	17.87	18.80	19.47
Level 9 .....	19.71	24.78	20.33	21.77	20.18
Level 10 .....	25.16	24.68	21.84	20.74	24.43
<b>Precision production, craft, and repair .....</b>					
Level 1 .....	18.37	20.13	15.46	18.08	17.79
Level 2 .....	—	—	8.23	—	—
Level 3 .....	—	—	8.80	—	—
Level 4 .....	9.37	—	10.30	9.62	10.03
Level 5 .....	12.38	15.06	11.24	11.42	13.16
Level 6 .....	16.05	16.09	12.59	12.53	15.08
Level 7 .....	17.48	19.16	15.12	18.73	16.80
Level 8 .....	20.11	22.50	18.17	18.93	19.44
Level 9 .....	19.99	24.94	20.38	22.23	21.51
Level 10 .....	25.12	24.68	22.04	20.54	24.95

See footnotes at end of table.

TABLE C-2. Mean hourly earnings<sup>1</sup> by occupational group and level,<sup>2</sup> all workers, selected areas,<sup>3</sup> 1998—Continued

Occupational group <sup>4</sup> and level	Boston- Worcester- Lawrence, MA-NH-ME-CT	Chicago- Gary- Kenosha, IL-IN-WI	Dallas- Fort Worth, TX	St. Louis, MO-IL	Washington- Baltimore, DC-MD-VA-WV
<b>BLUE COLLAR—Continued</b>					
<b>Machine operators, assemblers, and inspectors</b> .....	\$11.95	\$11.93	\$11.17	\$13.59	\$12.67
Level 1 .....	8.24	7.33	6.77	8.37	8.42
Level 2 .....	9.60	10.42	9.23	8.68	8.63
Level 3 .....	11.09	14.01	11.52	15.38	11.47
Level 4 .....	11.44	15.11	11.49	13.15	13.50
Level 5 .....	13.23	16.18	12.70	12.28	12.70
Level 6 .....	14.19	16.38	13.26	13.31	15.55
Level 7 .....	16.62	19.62	16.85	18.56	18.82
<b>Transportation and material moving</b> .....	15.64	15.00	13.43	14.91	14.32
Level 1 .....	—	6.94	—	—	—
Level 2 .....	11.02	12.19	9.88	8.93	9.15
Level 3 .....	12.42	13.89	12.60	15.97	11.09
Level 4 .....	14.22	15.66	14.38	12.92	15.27
Level 5 .....	18.84	16.95	14.40	14.86	14.69
Level 6 .....	18.53	20.46	15.55	—	15.37
Level 7 .....	19.91	18.96	—	19.05	20.90
<b>Handlers, equipment cleaners, helpers, and laborers</b> .....	11.41	10.97	9.28	11.73	11.13
Level 1 .....	9.93	8.54	7.93	7.32	9.23
Level 2 .....	10.89	10.65	7.60	10.29	11.08
Level 3 .....	12.38	13.85	10.98	13.32	11.94
Level 4 .....	12.46	15.73	11.35	11.43	12.22
Level 5 .....	13.45	15.78	12.62	13.56	12.27
Level 6 .....	—	—	—	17.71	—
Level 7 .....	—	19.16	—	—	—
<b>SERVICE</b> .....	11.00	10.75	8.85	9.26	10.13
Level 1 .....	8.16	7.02	6.07	6.66	7.08
Level 2 .....	8.72	7.47	7.16	6.87	7.70
Level 3 .....	9.06	9.03	7.40	8.28	8.25
Level 4 .....	10.73	10.83	9.59	8.33	10.98
Level 5 .....	15.65	18.25	18.39	12.34	12.43
Level 6 .....	14.76	16.54	13.74	13.53	13.05
Level 7 .....	18.69	17.85	16.67	14.77	18.50
Level 8 .....	17.60	22.92	17.92	17.33	15.92
Level 9 .....	23.16	24.78	19.58	17.90	19.79
Level 10 .....	—	30.28	24.31	—	—
Not able to be leveled .....	—	—	—	—	13.07
Protective service .....	14.80	17.26	12.38	14.86	16.03
Level 1 .....	—	10.08	7.18	—	—
Level 2 .....	11.21	7.01	7.46	—	—
Level 3 .....	8.47	10.55	9.14	7.99	7.59
Level 4 .....	13.41	9.29	10.12	—	14.05
Level 5 .....	18.20	15.58	11.37	11.70	13.92
Level 6 .....	17.27	18.85	15.32	—	14.68
Level 7 .....	18.74	19.66	16.63	15.08	19.41
Level 8 .....	—	23.43	18.54	15.50	17.10
Level 9 .....	22.51	—	19.39	17.82	19.81
Level 10 .....	—	30.28	24.31	—	—

See footnotes at end of table.

TABLE C-2. Mean hourly earnings<sup>1</sup> by occupational group and level,<sup>2</sup> all workers, selected areas,<sup>3</sup> 1998—Continued

Occupational group <sup>4</sup> and level	Boston- Worcester- Lawrence, MA-NH-ME-CT	Chicago- Gary- Kenosha, IL-IN-WI	Dallas- Fort Worth, TX	St. Louis, MO-IL	Washington- Baltimore, DC-MD-VA-WV
<b>SERVICE—Continued</b>					
Food service .....	\$7.54	\$7.49	\$6.79	\$7.06	\$7.41
Level 1 .....	6.41	5.75	5.52	6.26	6.35
Level 2 .....	5.85	6.55	6.84	5.33	6.57
Level 3 .....	6.35	7.10	5.43	7.10	6.70
Level 4 .....	9.06	9.93	8.73	7.31	8.48
Level 5 .....	11.00	—	10.50	9.09	9.96
Level 6 .....	—	—	12.91	13.40	12.76
Health service .....	10.44	9.28	7.86	8.25	9.30
Level 1 .....	—	7.63	6.73	—	7.34
Level 2 .....	10.87	7.91	7.42	7.31	8.84
Level 3 .....	10.08	9.89	7.98	8.19	10.09
Level 4 .....	10.11	10.34	8.64	9.83	9.18
Level 5 .....	10.55	—	—	—	9.08
Cleaning and building service .....	10.81	9.79	7.04	8.26	9.02
Level 1 .....	9.21	8.49	6.07	6.90	7.56
Level 2 .....	10.40	9.76	6.89	8.25	8.40
Level 3 .....	12.12	11.71	10.01	11.39	10.53
Level 4 .....	13.80	—	9.94	—	12.43
Level 5 .....	—	—	—	—	12.96
Level 6 .....	—	11.69	—	—	—
Personal service .....	11.22	10.60	13.25	10.10	9.90
Level 1 .....	—	6.47	5.36	7.21	6.74
Level 2 .....	7.28	6.95	7.71	7.67	7.72
Level 3 .....	10.05	8.65	8.10	7.22	9.01
Level 4 .....	10.75	17.67	—	7.78	12.47
Level 5 .....	19.63	—	—	—	12.90
Level 6 .....	11.90	—	—	—	10.05

<sup>1</sup> Earnings are the straight-time hourly wages or salaries paid to employees. They include incentive pay, cost-of-living adjustments, hazard pay, deferred income payments, and deadhead pay. Excluded are shift differentials, premium pay for overtime, vacations, and holidays, non-production bonuses, uniform and tool allowances, room and board, third party payments, on-call pay, and tips. The mean is computed by totaling the pay of all workers weighted by hours and dividing by the number of workers.

<sup>2</sup> Each occupation for which wage data are collected in an establishment is evaluated based on 10 factors, including knowledge, complexity, work environment, and others. Points are assigned based on the occupation's ranking within each factor. The points are summed to determine the overall level of the occupation.

<sup>3</sup> The average payroll month for Boston-Worcester-Lawrence, MA-NH-ME-CT was October 1998; Chicago-Gary-Kenosha, IL-IN-WI was October 1998; Dallas-Fort Worth, TX was July 1998; St. Louis, MO-IL was June 1998; and Washington-Baltimore, DC-MD-VA-WV was August 1998.

<sup>4</sup> A classification system including about 480 individual occupations is used to cover all workers in the civilian economy. Individual occupations are classified into one of nine major occupational groups.

NOTE: Dashes indicate that no data were reported or that data did not meet publication criteria. Overall occupational groups may include data for categories not shown separately. n.e.c. means "not elsewhere classified."